

REMARKS/ARGUMENTS

Respectfully submitted,

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REMARKS

The claims have been amended to remove non-elected subject matter. Claim 3 has been amended to include the embodiments of Claim 13, in part. All other amendments have been made to reflect proper dependency thereon. No new matter is believed to be added to the claimed invention.

Claims 12-13 are canceled. Claims 3-8, 11, and 14-17 are pending. Favorable consideration is respectfully requested.

At the outset, Applicants thank Examiner Garrett for the helpful comments during the courteous discussion of the present application held on October 6, 2003, which is summarized and expanded upon below. Further, Applicants thank Examiner Garrett for indicating during the above-mentioned discussion that the above amendment with the remarks below would further favorable prosecution of the present application. Further, Applicants thank Examiner Garrett for indicating that Claims 14 and 16-17 are allowable.

The objection to Claims 3 and 13 are believed to be obviated by the amendment thereto which replaces “and” with --or-- and the cancellation of Claim 13. Accordingly, withdrawal of this ground of objection is respectfully requested.

The rejections of Claims 3-6, 7-8, and 11-12 under 35 U.S.C. § 102(b) and/or § 103(a) over JP 10-168445 (from now Nakatsuka et al.) is believed to be obviated by the above amendment combined with the remarks below.

The present invention relates to an electroluminescence device containing a chemical compound of formula [3] and [17] to [18]. Compound [3] may contain substituents X1 to X20 in which some of pairs of these substituents may form a cyclic structure. When these substituents are arranged so that a pair of adjacent substituents are aryl groups, at least one of the substituents contain an amine group or an alkenyl group. Accordingly, the claimed

compounds have a fluoranthene skeleton structure containing at least one amine group or alkenyl group. The claimed chemical compound is particularly suited for a hole transporting layer or light emitting layer of an organic EL device (see Claims 3 and 15 above).

Nakatsuka et al. disclose, at best, an electroluminescence element containing an compound having only a fluoranthene skeleton structure. At best, formula (2) of Nakatsuka et al. discloses that such a structure may be substituted by a aryl group. However, Nakatsuka et al. fail to disclose or suggest a fluoranthene skeleton structure comprising any substituted alkenyl group. More specifically, formula (2) of Nakatsuka et al. fails altogether to disclose a fluoranthene skeleton structure comprising any substituted alkenyl group, let alone an amino group. Further, one skilled in the art would not equate an alkenyl group to the aryl group disclosed by Nakatsuka et al. This can easily be appreciated by one picking up an introductory Organic Chemistry textbook and finding volumes of separate chapters therein, each addressing alkenyl groups and aryl groups as separate and distinct entities having separate and distinct reactivities. Accordingly, the skilled artisan would appreciate that an aryl group does not include the claimed alkenyl groups and vice versa.

Clearly, no case of anticipation can be supported by the disclosure of Nakatsuka et al. because they fail to disclose the all of the embodiments of the claimed electroluminescence device (see Claim 3 above) and/or the claimed compound (see Claim 15 above).

Accordingly, withdrawal of this ground of rejection is respectfully requested.

In addition, no prima facia case of obviousness can be supported by the disclosure of Nakatsuka et al. because they fail to disclose or suggest the claimed compounds having alkenyl substituents, much less amino substituents. At best, Nakatsuka et al. discloses an electroluminescence element containing an compound having only a fluoranthene skeleton structure where the compound does not contain any amine group or any alkenyl group, but rather aryl groups. In contrast, the claimed invention relates to a device containing

compounds having a fluoranthene skeleton structure containing at least one amine group or alkenyl group.

The unsubstituted fluoranthene skeleton of Nakatsuka et al. and the amino and alkenyl substituted fluoranthene skeleton-containing compounds of the claimed compounds are not even homologs of each other. The Federal Circuit has defined the parameters that may be considered in determining the proper use of chemical structure as the basis for obviousness rejections under 35 U.S.C. § 103 in *In re Jones*, 21 USPQ2d 1941 (Fed. Cir. 1992). The court cited the following examples of relationships that have given rise to a *prima facie* case of obviousness:

triorthoesters and tetraorthoesters;  
stereoisomers;  
adjacent homologs and structural isomers; and  
acid and ethyl ester (*Id.*, at 1943).

In the present case, there exists no motivation to modify the compounds disclosed by Nakatsuka et al. to contain either an amine and/or alkenyl group because Nakatsuka et al. is silent in this regard and because the relationship between the claimed compounds and those disclosed by Nakatsuka et al. fail to satisfy any of the above-mentioned relationships to be defined as homologs by the Federal Circuit.

In light of the above, it appears as if the Office is relying on the Applicants disclosure to supply motivation to modify the fluoranthene skeleton-containing compounds disclosed by Nakatsuka et al to contain at least one amine group or alkenyl group in order to arrive at the claimed compounds. However, this is clearly improper according to a recent decision by the U.S. Federal Courts in *In re Lee*. The Lee Court indicated that the Office must provide specific motivation, hint, or suggestion, found in the references relied upon to support a

prima facia case of obviousness. In the present case, the Office appears to rely on the present specification for motivation, which is clearly forbidden according to the Lee Court. In light of this decision, Applicants respectfully request the Office not to use the present specification to find motivation that is not present in any of the disparate disclosures of the references discussed herein. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The objection to the specification should be withdrawn in light of the substitute Abstract filed herewith. Early and favorable indication of the same is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is now in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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